

**REMARKS**

Entry of the foregoing amendment(s) is respectfully requested.

The claims have been amended to eliminate multiple dependency and to place them in better condition for U.S. patent practice.

Should the Examiner have any questions concerning the subject application, a telephone call to the undersigned would be appreciated.

Respectfully submitted,

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**Marked-up Claims 1-23**

1. (Amended) [The use as a] A gelling agent[, of] comprising a relatively nonpolar compound or a nonionic surfactant, [of] comprising at least one block copolymer comprising the following units:

- |                             |               |
|-----------------------------|---------------|
| $-X-(R^1)_m-(OA)_n-X-$      | (I), and      |
| $-[NH-R^2-NHCO-R'^2-CO]_r-$ | (IIa), and/or |
| $-[NH-R^3-CO]_s-$           | (IIb), and    |
| $-OC-R^4-CO-$               | (III)         |

in which units:

- ☐ X corresponds to the end function of said unit after reaction with an amine or carboxylic acid function;
- ☐  $R^1$ , which may be identical or different, [represent] represents a linear or branched alkyl radical comprising 2 to 4 carbon atoms;
- ☐ OA, which may be identical or different, [represent] represents an oxyethylenated, oxypropylenated or oxybutylenated radical, or mixtures thereof;
- ☐  $R^2$ ,  $R'^2$ ,  $R^3$  and  $R^4$ , which may be identical or different, represent:
  - a linear or branched alkyl radical comprising 2 to 18 carbon atoms,
  - an aryl radical comprising one or more optionally substituted aromatic nuclei,
- ☐ m is equal to 0 or 1,
- ☐ n is an integer between 4 and 800,
- ☐ r is such that the number of amide bonds is between 1 and 15 per unit (I),

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- ☐ s is such that the number of amide bonds is between 1 and 15 per unit (I),
- ☐ the molar ratio of the number of units (III) to the number of units (I) is between 0.5/1 and 1.4/1;
- ☐ the various units are linked together at least by means of amide bonds; and
- ☐ the number-average molar mass of the copolymer is less than 100 000 g/mol.

2. (Amended) The [use] gelling agent as claimed in [the preceding] claim 1, [characterized in that] wherein the units (I) of the copolymer comprise a sequence of oxyethylenated, oxypropylenated or oxyethylenated/oxypropylenated radicals, the sum of the units being equal to n.

3. (Amended) The [use] gelling agent as claimed in [either of the preceding claims] claim 1, [characterized in that] wherein the radicals  $R^2$ ,  $R'^2$ ,  $R^3$  and  $R^4$ , which may be identical or different, represent linear or branched radicals comprising 2 to 12 carbon atoms[, and preferably methylene radicals, optionally bearing one or more methyl radicals].

4. (Amended) The [use] gelling agent as claimed in [the preceding] claim 1, [characterized in that] wherein the radicals  $R^2$ ,  $R'^2$ ,  $R^3$  and  $R^4$ , which may be identical or different, are [chosen] selected from the group consisting of:

- ☐ ethyl, 1-methylethyl, propyl, 1-methylpropyl, butyl, hexyl, heptyl, octyl, decyl, undecyl and lauryl radicals.

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5. (Amended) The [use] gelling agent as claimed in [any one of the preceding claims] claim 1, [characterized in that] wherein the radicals  $R^2$ ,  $R'^2$ ,  $R^3$  and  $R^4$ , which may be identical or different, represent aryl radicals comprising one or more optionally substituted aromatic nuclei.

6. (Amended) The [use] gelling agent as claimed in [the preceding] claim 1, [characterized in that] wherein the radicals  $R^2$ ,  $R'^2$ ,  $R^3$  and  $R^4$ , which may be identical or different, comprise:

- ★ an aromatic nucleus, the reactive functions (amines or carboxylic acids) being in an ortho, meta or para position,
- ★ two aromatic nuclei, linked via inert groups, or peri-fused, [for instance divalent naphthyl radicals,] the reactive functions (amines or carboxylic acids) being on the carbon atoms 1 and 2, 1 and 4, 1 and 5, 1 and 6, 1 and 7 or 2 and 7.

7. (Amended) The [use] gelling agent as claimed in [any one of claims 1 to 4] claim 1, [characterized in that] wherein the units (IIa) or (IIb) are [chosen] selected from the group consisting of polyamide 6, polyamide 10, polyamide 11, polyamide 12, polyamide 6, 6 or a random copolymer of at least two such polyamides, in all proportions[, preferably 50/50].

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8. (Amended) The [use] gelling agent as claimed in [any one of the preceding claims] claim 1, [characterized in that] wherein r and s, which may be identical or different, are such that the number of amide bonds is between 5 and 10 per unit (I).

9. (Amended) The [use] gelling agent as claimed in [any one of the preceding claims] claim 1, [characterized in that] wherein the number-average molecular mass of the copolymer is between 10 000 and 50 000 g/mol.

10. (Amended) The [use] gelling agent as claimed in [any one of the preceding claims] claim 1, [characterized in that] wherein the relatively nonpolar compound is in the Hansen solubility space, and has the following parameters:

- $\delta P$  of Keesom interactions of less than or equal to  $16.5 \text{ (J/cm}^3\text{)}^{1/2}$
- $\delta H$  of hydrogen bonds of less than or equal to  $10.5 \text{ (J/cm}^3\text{)}^{1/2}$
- $\delta D$  of London interactions of greater than or equal to  $15 \text{ (J/cm}^3\text{)}^{1/2}$ .

11. The [use] gelling agent as claimed in [any one of the preceding claims] claim 1, [characterized in that] wherein the nonionic surfactant is [chosen] selected from the group consisting of:

- polyoxyalkylenated (polyethoxyethylenated, polyoxypropylenated or polyoxybutylenated) alkylphenols in which the alkyl substituent is  $C_6-C_{12}$  and containing from 5 to 25 oxyalkylene units;

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- polyoxyalkylenated C<sub>8</sub>-C<sub>22</sub> aliphatic alcohols containing from 1 to 25 oxyalkylene (oxyethylene or oxypropylene) units;
- products resulting from the condensation of ethylene oxide and/or propylene oxide with propylene glycol or ethylene glycol;
- ethoxylated and/or propoxylated C<sub>8</sub>-C<sub>18</sub> fatty acids containing from 5 to 25 ethoxylated and/or propoxylated units;
- alkoxyated amido amines containing from 1 to 50 oxyalkylenated units;
- alkoxyated terpenic hydrocarbons [such as ethoxylated and/or propoxylated  $\alpha$ - or  $\beta$ -pinenes], containing from 1 to 30 oxyethylene and/or oxypropylene units;
- alkylpolyglycosides which may be obtained by condensation of glucose with primary fatty alcohols containing a C<sub>4</sub>-C<sub>20</sub> alkyl group and also an average number of glucose units of about from 0.5 to 3 per mole of alkylpolyglycoside.

12. (Amended) The [use] gelling agent as claimed in [any one of the preceding claims] claim 1, [characterized in that] wherein the amount of copolymer relative to the relatively nonpolar compound or the nonionic surfactant is between 0.1 % and 15 % by weight [and preferably between 0.5 % and 10 % by weight].

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13. (Amended) [The use as claimed in any one of the preceding claims, characterized in that, in case of] A method for gelation of a relatively nonpolar compound, comprising using the gelling agent as claimed in claim 1, wherein the copolymer is combined with a nonionic or anionic surfactant.

14. (Amended) The [use] method as claimed in [the preceding] claim 13, [characterized in that] wherein the amount of nonionic or anionic surfactant relative to the relatively nonpolar compound is between 5% and 20% by weight.

15. (Amended) The [use] gelling agent as claimed in [any one of the preceding claims] claim 1, [characterized in that] wherein the copolymer is combined with a filler of lamellar structure.

16. (Amended) The [use] gelling agent as claimed in [the preceding] claim 15, [characterized in that] wherein the amount of filler represents up to 20% by weight of the copolymer.

17. (Amended) The [use] gelling agent as claimed in [either of claims 15 and 16] claim 15, [characterized in that] wherein the filler is introduced during the preparation of the copolymer and/or during the use of said copolymer.

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18. (Amended) [The use as claimed in any one of claims 1 to 17, characterized in that the copolymer and the relatively nonpolar compound or the nonionic surfactant form part of the] A composition of formulations intended for cleaning metals comprising an effective amount of the gelling agent according to claim 1.

19. (Amended) [The use as claimed in any one of claims 1 to 17, characterized in that the copolymer and the relatively nonpolar compound or the nonionic surfactant form part of the composition of] A detergent [formulations which may be] formulation used in the industrial field comprising an effective amount of the gelling agent according to claim 1.

20. (Amended) [The use as claimed in any one of claims 1 to 17, characterized in that the copolymer and the relatively nonpolar compound or the nonionic surfactant form part of the composition formulations] A formulation intended for stripping paints and varnishes comprising an effective amount of the gelling agent according to claim 1.

21. (Amended) [The use as claimed in any one of claims 15 to 17, characterized in that the copolymer and the relatively nonpolar compound or the nonionic surfactant form part of the composition of formulations] A method intended for cleaning or stripping vertical surfaces comprising using the gelling agent according to claim 15.



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22. (Amended) [The use as claimed in any one of claims 1 to 17, characterized in that the copolymer and the relatively nonpolar compound or the nonionic surfactant form part of the composition of formulations intended] A method for treating plants comprising using an effective amount of the gelling agent according to claim 1.

23. (Amended) [The use as claimed in any one of claims 1 to 17, characterized in that the copolymer and the relatively nonpolar compound or the nonionic surfactant form part of the] A composition [of formulations used in the field of] for ink printing [inks] comprising an effective amount of the gelling agent according to claim 1.